

What is claimed:

1. A system for dynamically pricing a product, the system comprising:
 - a. means for collecting and storing data on past sales;
 - b. means for forecasting normalized future sales volume based upon the past sales data;
 - c. means for forecasting normalized future sales volume based upon the past sales data;
 - d. means for determining price sensitivity of consumers to changes in price of the product based upon past data;
 - e. means for forecasting future sales volume at different prices by adjusting the normalized future sales volume forecast by the price sensitivity; and
 - f. means for determining an optimal price that maximizes profits using the future sales volume forecast and costs for the product.
2. The system of claim 1 further comprising means for classifying the past sales into one or more channel segments, whereby each of the past sales is classified into only one channel segment.
3. The system of claim 2, wherein the means for determining an optimal price determines an optimal price in each of the channel segments
4. The system of claim 2, wherein the costs for the product include a different channel segment cost in each of the channel segments.
5. The system of claim 1, wherein the means for determining an optimal price accounts for one or more strategic objectives.

6. The system of claim 5, wherein one of said strategic objectives is a minimum price for the product.
7. The system of claim 5, wherein one of said strategic objectives is a maximum price for the product.
8. The system of claim 5, wherein one of said strategic objectives is a minimum sales volume for the product.
9. The system of claim 5, wherein one of said strategic objectives is a maximum sales volume for the product.
10. The system of claim 1 further comprising a means for forecasting a response of a competitor to a change in the price of the product by the seller, whereby the means for forecasting future sales volume at different prices accounts for the competitor's response.
11. The system of claim 1 further comprising for a means for determining lost sales data, whereby the means for forecasting future sales volume at different prices accounts for the competitor's response.
12. The system of claim 1 further comprising a means for alerting the seller of an occurrence of a pre-specified event.
13. The system of claim 12, wherein the means for alerting the seller compares prices for actual sales to the optimal price, and the pre-specified event is a difference between the actual sales and the optimal price.

14. The system of claim 12, wherein the means for alerting the seller compares actual sales at the optimal price to the forecasted sales volumes at the optimal price.
15. The system of claim 14, wherein the pre-specified event occurs when a ratio of actual sales volume to the forecasted sales volume is less than a first pre-specified amount.
16. The system of claim 14, wherein the pre-specified event occurs when the forecasted sales volume exceeds the actual sales volume by more than a second pre-specified amount.
17. The system of claim 1, wherein the mean for determining price sensitivity uses a logistic mathematical model.
18. A method of dynamically pricing a product, the method comprising the steps of:
 - a. collecting data on past sales;
 - b. forecasting normalized future sales volume based upon the past sales data;
 - c. determining price sensitivity of consumers to changes in price of the product based upon the past sales data;
 - d. forecasting future sales volume at different prices by adjusting the normalized future sales volume forecast by the price sensitivity; and
 - e. determining an optimal price that maximizes profits using the future sales volume forecast and costs for the product.

19. The method of claim 18 further comprising the step of dynamically determining the costs for the product.
20. The method of claim 18 further comprising the step of classifying the past sales into different channel segments, wherein each of the past sales is classified into only one of the channel segments and wherein the step of forecasting future sales at different prices further comprises forecasting future sales in each of the channel segments.
21. The method of claim 20, wherein the costs for the product include a different channel segment cost for each of the channel segments.
22. The method of claim 20, wherein the step of determining an optimal price is performed for each of the channel segments.
23. The method of claim 18, wherein the step of determining an optimal price includes accounting for one or more strategic objectives.
24. The method of claim 23 further comprising accepting and storing one or more strategic objectives from the seller.
25. The method of claim 23, wherein one of said strategic objectives is a minimum price for the product.
26. The method of claim 23, wherein one of said strategic objectives is a maximum price for the product.

27. The method of claim 23, wherein one of said strategic objectives is a minimum sales volume for the product.
28. The method of claim 23, wherein one of said strategic objectives is a maximum sales volume for the product.
29. The method of claim 18, wherein the step of forecasting future sales volume further accounts for inventory of the product.
30. The method of claim 29, wherein the inventory accounts for the forecasted sales for the product at the optimal price.
31. The method of claim 18, wherein the step of forecasting future sales volume further accounts for an expected response of a competitor.
32. The method of claim 18, wherein the step of forecasting future sales volume further accounts for lost sales data.
33. The method of claim 18, further comprising the step of comparing actual sales at the optimal price to forecasted sales volumes at the optimal price.
34. The method of claim 33 further comprising the step of adjusting the optimal price to account for actual sales.

35. The method of claim 33 further comprising the step of alerting the seller when the ratio of actual sales volume to forecasted sales volume at the optimal price is less than a first pre-specified amount.
36. The method of claim 33 further comprising the step of alerting the seller when the actual sales volume is less than the forecasted sales volume by more than a second pre-specified amount.
37. The method of claim 18, wherein the step of determining an optimal price further comprising accounting for a volume discount for the product.
38. The method of claim 18, wherein the step of determining price sensitivity further comprises using a logistic mathematical model.
39. The method of claim 18, wherein the step of determining price sensitivity further comprises accounting for a relationship between sales of the product and a second product.
40. A dynamic pricing network for determining a recommended price for a product, the network comprising:
a database storing information on prior transactions of the product;
a normalized sales forecast module that accesses the information in the database to form a normalized forecast of future sale volumes;
a price sensitivity module that accesses the information in the database to determine price sensitivity of consumers to changes in price of the product;

a sales forecast module that uses the normalized forecast and the price sensitivity to form a forecast of future sales volumes at each of multiple different prices;

a costs module that accesses the information in the database to determine costs for the product; and

an optimizer that recommends a profit-maximizing price using the forecast of future sales volumes and the costs.

41. The dynamic pricing network of claim 40 further comprising a pre-processor that accesses the information in the database and classifies the past transactions into one or more channel segments, whereby the pre-processor classifies each of the transactions into only one channel segment.

42. The dynamic pricing network of claim 41, wherein the optimizer further determines an optimal price in each of the channel segments.

43. The dynamic pricing network of claim 41, wherein the cost module further determines a cost in each of the channel segments.

44. The dynamic pricing network of claim 40 further comprising a strategic objectives database storing data on one or more strategic objectives, wherein the optimizer accesses the strategic objectives database and accounts for one or more strategic objectives when recommending the profit-maximizing price.

45. The dynamic pricing network of claim 40 further comprising:
an alert condition database that stores one or more alert conditions;
and
an alert generator that notifies a user when one of the alert conditions occurs.
46. An article of manufacture, which comprises a computer readable medium having stored therein a computer program for dynamically determining a price for a product, the computer program comprising:
(a) a first code segment which, when executed on a computer, defines a database storing information on prior transactions of the product;
(b) a second code segment which, when executed on a computer, defines a normalized sales forecast module that automatically forms a normalized forecast of future sales;
(c) a third code segment which, when executed on a computer, defines a price sensitivity module that automatically determines price sensitivity for the product;
(d) a fourth code segment which, when executed on a computer, uses the normalized forecast and the price sensitivity to form forecasts of future sales of the product at different prices;
(e) a fifth code segment which, when executed on a computer, determines costs for the product; and
(f) a sixth code segment which, when executed on a computer, uses the forecast of future sales at different prices and the costs to automatically recommend a profit-maximizing price.

47. A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for dynamically determining a price a product, said method steps comprising :
- a. collecting data on past sales;
 - b. forecasting a normalized future sales volume under current conditions identified in the past sales data;
 - c. determining price sensitivity of consumers to changes in price of the product based upon the past sales data;
 - d. forecasting an adjusted future sales volume at different prices by adjusting the normalized future sales volume forecast by the price sensitivity; and
 - e. determining an optimal price that maximizes profits using the adjusted future sales volume forecast and costs for the product.